

AMENDMENT TO THE CLAIMS

1. (currently amended): A ribbon cartridge for use in a card printer comprising:

a cartridge housing including a supply spool enclosure, a take-up spool enclosure, a pair of ribbon guides, and a gap between the ribbon guides and between the supply and take-up spool enclosures;

a supply spool contained in the supply spool enclosure;

a take-up spool contained in the take-up spool enclosure;  
and

a supply of ribbon that extends from the supply spool, over the ribbon guides and the gap, and to the take-up spool-; and

a supply circuit having a memory containing supply information relating to the ribbon cartridge, the supply information including a security code.

2. (original): The ribbon cartridge of claim 1, wherein the gap is defined by interior side walls of the spool and take-up enclosures, wherein the ribbon guides are formed by exposed top surfaces of the interior side walls.

3. (original): The ribbon cartridge of claim 1, wherein the ribbon guides are positioned above and between the supply and take-up spools.

4. (original): The ribbon cartridge of claim 1, wherein the gap is defined by interior side walls of the spool and take-up enclosures and is accessible from bottom and rear sides of the housing.

5. (original): The ribbon cartridge of claim 4, wherein the gap is further defined by a plate joining the interior side walls of the supply and take-up spool enclosures.

6. (currently amended): The ribbon cartridge of claim 1, wherein the ~~printhead~~ gap has a width at the ribbon guides of approximately 0.75 inches.

7. (original): The ribbon cartridge of claim 1 including a card cleaner roller rotatably supported by the housing adjacent a top surface of the housing.

8. (original): The ribbon cartridge of claim 7, wherein the card cleaner roller is supported at a rear end adjacent a rear wall of the housing and at a front end adjacent a front wall of the housing.

9. (original): The ribbon cartridge of claim 7, wherein the card cleaner roller includes a debris-collecting exterior surface.

10. (original): The ribbon cartridge of claim 7, wherein the card cleaner roller is removable.

11. (original): The ribbon cartridge of claim 1, wherein the supply and take-up spool enclosures each include a rear opening for receiving a core of each of the supply and take-up spools, respectively.

12. (currently amended): The ribbon cartridge of claim 1, including a rotation inhibitor engaging one of the supply spool and the take-up spool and providing resistance to rotation ~~of the supply spool~~ thereof.

13. (original): The ribbon cartridge of claim 12, wherein the rotation inhibitor includes a tab member extending from the housing.

14. (original): The ribbon cartridge of claim 1 including a rotation inhibitor engaging the take-up spool and providing resistance to rotation of the take-up spool.

15. (original): The ribbon cartridge of claim 14, wherein the rotation inhibitor includes a tab member extending from the housing.

16. (original): The ribbon cartridge of claim 1, wherein the supply spool enclosure includes an opening through which the ribbon extends.

17. (original): The ribbon cartridge of claim 1, wherein the take-up spool enclosure includes an opening through which the ribbon extends.

18. (original): The ribbon cartridge of claim 17, wherein the housing includes a finger hold.

19. (original): The ribbon cartridge of claim 1, wherein the supply and take-up spool enclosures have different exterior shapes.

20. (currently amended): The ribbon cartridge of claim 1, wherein the including a supply circuit is mounted to the cartridge housing having a memory containing supply information relating to the ribbon cartridge.

21. (currently amended): The ribbon cartridge of claim ~~20~~ 1,

wherein the supply circuit is mounted to the supply spool or the take-up spool.

22. (currently amended): The ribbon cartridge of claim ~~20~~ 1, wherein the supply information includes ~~a lot code, a supplier code, a ribbon type, a security code, a printer configuration setting, a number of prints completed, or~~ a number of prints remaining.

23. (currently amended): The ribbon cartridge of claim ~~20~~ 1, wherein the memory of the supply circuit includes a memory bank, the memory bank having a limit as to a number of times data can be written thereto.

24. (currently amended): The ribbon cartridge of claim ~~20~~ 1, wherein:

one of the supply and take-up spools includes a core and a ribbon guide that extends substantially perpendicularly from the core; and

the supply circuit is mounted to the ribbon guide and includes an opening through which the core extends.

25. (currently amended): The ribbon cartridge of claim ~~21~~ 1, wherein the supply circuit is configured to break upon removal from the ribbon cartridge.

26. (currently amended): A ribbon cartridge for use in a card printer comprising:

a cartridge housing including front and rear walls, a supply spool enclosure, a take-up spool enclosure, and a cover extending over an opening of one of the spool enclosures; and

a cleaner roller rotatably supported between the front and

rear walls above the cover.

27. (previously presented): The ribbon cartridge of claim 26, wherein the cleaner roller includes a debris-collecting surface.

28. (previously presented): The ribbon cartridge of claim 26, wherein the cleaner roller is mounted adjacent a top side of the housing.

29. (previously presented): The ribbon cartridge of claim 26, wherein the cleaner roller includes front and rear ends that are each received in an aperture of the respective front and rear wall of the housing.

30. (previously presented): The ribbon cartridge of claim 29, wherein the apertures are shaped to allow the cleaner roller to move between a receiving position and a cleaning position.

31. (canceled)

32. (currently amended): The ribbon cartridge of claim 26, wherein:

the housing ~~includes~~ supply and take-up spool enclosures each ~~having~~ have an interior side wall separated from each other by a gap, and a plate connecting the interior side walls;

a supply spool contained in the supply spool enclosure;

a take-up spool contained in the take-up spool enclosure;  
and

print ribbon having a first end wound on supply spool, a second end wound on the take-up spool, and a middle portion extending between the supply and take-up spools and over the interior side walls.

33. (previously presented): The ribbon cartridge of claim 32, wherein the interior side walls include ribbon guide members positioned above and between the supply and take-up spools, the print ribbon supported on the ribbon guide members.

34. (previously presented): The ribbon cartridge of claim 32 including a rotation inhibitor engaging the supply or take-up spool, the rotation inhibitor providing resistance to rotation of the spool.

35. (previously presented): The ribbon cartridge of claim 34, wherein the rotation inhibitor includes a tab member extending from the housing.

36. (currently amended): The ribbon cartridge of claim 26, wherein:

one of the supply and take-up ~~the housing includes a spool~~  
enclosures ~~that~~ includes the front and rear walls, an  
interior side wall, a bottom, and an exterior side  
wall, the front and rear walls each including an  
opening; and

a spool including a core having a front portion extending  
through the opening in the front wall and a rear  
portion extending through the opening in the rear wall.

37. (currently amended): The ribbon cartridge of claim 36, wherein one of the supply and take-up spool enclosures includes a  
core support wall extending from the bottom of the spool  
enclosure, the core support wall positioned between the front and  
rear walls.

38. (previously presented): The ribbon cartridge of claim 36

including a rotation inhibitor engaging the core of the spool, the rotation inhibitor providing resistance to rotation of the spool.

39. (previously presented): The ribbon cartridge of claim 38, wherein the rotation inhibitor includes a tab member extending from the spool enclosure.

40. (previously presented): The ribbon cartridge of claim 26, wherein the housing includes a finger grab.

41. (currently amended): A ribbon cartridge for use in a card printer comprising:

- a housing including a spool enclosure having an interior side wall, a bottom, an exterior side wall, ~~and front and rear walls,~~ the front and rear walls each including an opening, and a core support wall extending from the bottom and positioned between the front and rear walls; and

- a spool including a core having a front portion extending through the opening in the front wall of the spool enclosure and a rear portion extending through the opening in the rear wall.

42. (canceled)

43. (previously presented): The ribbon cartridge of claim 41 including a rotation inhibitor engaging the core of the spool, the rotation inhibitor providing resistance to rotation of the spool.

44. (previously presented): The ribbon cartridge of claim 43, wherein the rotation inhibitor includes a tab member extending

from the spool enclosure.

45. (previously presented): The ribbon cartridge of claim 41 including a cleaner roller rotatably supported between the front and rear walls.

46. (previously presented): The ribbon cartridge of claim 45, wherein the cleaner roller includes a debris-collecting surface.

47. (previously presented): The ribbon cartridge of claim 45, wherein the cleaner roller is mounted adjacent a top side of the housing.

48. (previously presented): The ribbon cartridge of claim 45, wherein the cleaner roller includes front and rear ends that are each received in an aperture of the respective front and rear wall of the housing.

49. (previously presented): The ribbon cartridge of claim 48, wherein the apertures are shaped to allow the cleaner roller to move between a receiving position and a cleaning position.

50. (previously presented): The ribbon cartridge of claim 45, wherein:

the housing includes a cover extending over an opening of  
the spool enclosure; and  
the cleaner roller is positioned above the cover.

51. (new): The ribbon cartridge of claim 1, wherein the supply information includes a lot code.

52. (new): The ribbon cartridge of claim 1, wherein the supply information includes a supplier code.



53. (new): The ribbon cartridge of claim 1, wherein the supply information includes a ribbon type.

54. (new): The ribbon cartridge of claim 1, wherein the supply information includes a printer configuration setting.

55. (new): The ribbon cartridge of claim 1, wherein the supply information includes a number of prints completed.

56. (new): A ribbon cartridge for use in a card printer comprising:

- a cartridge housing including a supply spool enclosure, a take-up spool enclosure, a pair of ribbon guides, and a gap between the ribbon guides and between the supply and take-up spool enclosures;
- a supply spool contained in the supply spool enclosure;
- a take-up spool contained in the take-up spool enclosure;
- a supply of ribbon that extends from the supply spool, over the ribbon guides and the gap, and to the take-up spool; and
- a supply circuit having a memory containing supply information relating to the ribbon cartridge, the supply information including a number of prints remaining.

57. (new): The ribbon cartridge of claim 56, wherein the supply information includes a supplier code.

58. (new): The ribbon cartridge of claim 56, wherein the supply information includes a ribbon type.

59. (new): The ribbon cartridge of claim 56, wherein the supply information includes a printer configuration setting.

60. (new): The ribbon cartridge of claim 56, wherein the supply information includes a number of prints completed.

61. (new): The ribbon cartridge of claim 56, wherein the supply information includes a locked code.

62. (new): The ribbon cartridge of claim 56 including a card cleaner roller rotatably supported by the housing adjacent a top surface of the housing.

63. (new): A ribbon cartridge for use in a card printer comprising:

- a cartridge housing including a supply spool enclosure, a take-up spool enclosure, a pair of ribbon guides, and a gap between the ribbon guides and between the supply and take-up spool enclosures, wherein the gap between the ribbon guides is approximately 0.75 inches;
- a supply spool contained in the supply spool enclosure;
- a take-up spool contained in the take-up spool enclosure;
- and
- a supply of ribbon that extends from the supply spool, over the ribbon guides and the gap, and to the take-up spool.

64. (new): The ribbon cartridge of claim 63, wherein the gap is defined by interior side walls of the spool and take-up enclosures, wherein the ribbon guides are formed by exposed top surfaces of the interior side walls.

65. (new): The ribbon cartridge of claim 63 including a card cleaner roller rotatably supported by the housing adjacent a top surface of the housing.

66. (new): The ribbon cartridge of claim 65, wherein the card cleaner roller includes a debris-collecting exterior surface.

67. (new): The ribbon cartridge of claim 63 including a supply circuit having a memory containing supply information relating to the ribbon cartridge.

68. (new): The ribbon cartridge of claim 67, wherein the supply information includes a security code.

69. (new): The ribbon cartridge of claim 67, wherein the supply information includes a number of prints remaining.

70. (new): The ribbon cartridge of claim 67, wherein the supply information includes a lot code.

71. (new): The ribbon cartridge of claim 67, wherein the supply information includes a supplier code.

72. (new): The ribbon cartridge of claim 67, wherein the supply information includes a ribbon type.

73. (new): The ribbon cartridge of claim 67, wherein the supply information includes a printer configuration setting.

74. (new): The ribbon cartridge of claim 67, wherein the supply information includes a number of prints completed.